



Acheson Colloids Company
1600 Washington Avenue
Port Huron, MI 48060
Tel: (810) 984-5581
Fax: (810) 984-1446
www.achesonindustries.com

Electrodag® 479SS

Silver Based Polymer Thick Film Ink

DESCRIPTION

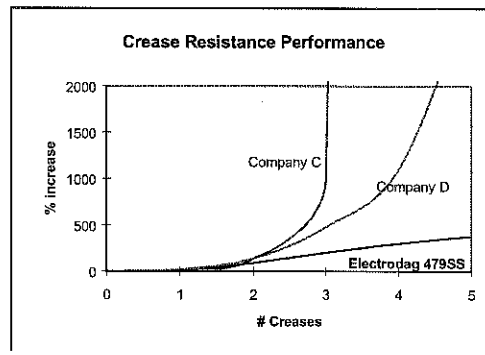
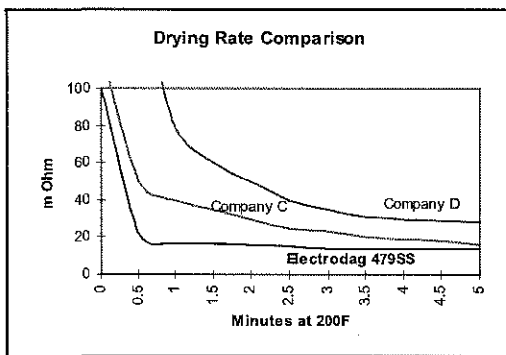
Electrodag 479SS is a conductive, silver-based polymer thick film ink specifically designed to be screen printed on membrane switches.

TYPICAL APPLICATIONS

Membrane Switches Flexible Circuitry Display Devices

ADVANTAGES

- Fast drying
- Excellent abrasion resistance and hardness
- Excellent creasability
- Excellent fine line printing
- Extended screen residence time
- Very low sheet resistance
- Superior adhesion to polyester film



TYPICAL PROPERTIES (of wet product)

Pigment	: Silver
Binder	: Thermoplastic
Solvent	: Carbitol acetate
Percent solids	: 74.6% typical
Color	: Silver
Density	: 21.4 lbs/gal (2.56 kg/l)
Flash point	: 230°F (110°C) Tag closed cup
Pencil hardness	: 2H
Viscosity	: 12,000 mPa's, RVT 20 rpm, #6 spindle following 5-minute shake 3-hour rest
VOC	: 5.45 lbs/gal (653 g/l)

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TYPICAL PROPERTIES (as cured)

Coverage	: 565 sq ft/gal @ 1 mil (5.87 m ² /kg @ 25 µm)
Sheet Resistivity	: typically <0.02 ohm/sq/mil
Maximum service temperature	: 392°F (200°C)

APPLICATION DETAILS

This product is applied by standard screen printing techniques.

Mixing/Blending/Dilution

Electrodag 479SS is supplied ready for use. Should thinning become necessary, dilute 2% by weight with carbitol acetate. **Electrodag 479SS** should be gently stirred prior to use. The dried film thickness and final resistance is influenced by a number of factors including screen mesh size, squeegee material, screen material, and emulsion thickness.

Application

Recommended thickness	: 0.3-0.5 mil dried (7.5-12.5 µm)
Emulsion thickness	: 0.8-1.5 mils (20-38 µm) solvent-resistant emulsion
Screen type and mesh	: monofilament polyester—157 to 280 mesh stainless steel—165 to 325 mesh
Squeegee type	: polyurethane or other solvent-resistant material— 60-70 durometer for polyester screens 70-80 durometer for stainless steel screens

Curing

Electrodag 479SS can be cured at 200°F (93°C) for 5 minutes to achieve typical properties. Higher temperatures and longer durations improve conductivity and film properties.

Cleanup

To clean screen and equipment, use a 25% carbitol acetate 75% MEK blend.

STORAGE/SHIPPING HANDLING

Store **Electrodag 479SS** at temperatures below 90°F (32°C). Keep from freezing. Keep container tightly closed when not in use. Store in a cool, well-ventilated area. Keep away from heat, sparks, and open flame. Protect material from direct sunlight. Shelf life is 6 months under original seal. Ground and bond containers when transferring materials. Empty containers may retain hazardous properties. Follow all MSDS/label warnings even after container is emptied.

APPLICATION ASSISTANCE

Acheson's **Application Specialists** are available to assist you in production start-up with **Electrodag 479SS**. For more information, contact Acheson Colloids Company, (810) 984-5581, fax (810) 984-1446, web.mail@nstarch.com, or visit our website at www.achesonindustries.com.

HEALTH & SAFETY

This product contains carbitol acetate. Harmful if swallowed, inhaled, or absorbed through skin. May cause eye irritation. Wash thoroughly after handling. Keep away from heat, sparks, and open flame. Keep container tightly closed when not in use. Use with adequate ventilation. Avoid breathing vapor. See Acheson's Material Safety Data Sheet for proper first aid instructions.

NOTE:

Electrodag is a registered trademark of Acheson Industries.